Multi-Format to HDMI Conversion Box

(MRM-701)

USER MANUAL MRM-701

V1.0

Package Contents-

- 1 MRM-701
- 1 user manual
- 1 power adapter DC 12V with lock
- 1 remote controller
- 1 RS-232 1.8M cable (DB-9 Male to Female)
- 1 RS-232 control software CD
- 2 rack rails, 6 screws for MRM-701 only

Any thing missed, please contact with your vendor.

Introduction

The MRM-701 is a multi-format to HDMI convertor for digital and analog video input. It combines five independent switchers in a single compact enclosure: 3x1 HDMI with embedded audio, 1x VGA, 1x YPbPr video, 1x CVBS, 1x S-Video, and 4x1 analog stereo audio. The MRM-701 features three selectable switching modes, including the ability to route all and HDMI sources to the display using a single HDMI cable. Continuous EDID communications between the HDMI and VGA sources and the display device ensures the reliable display of video. HDMI inputs and outputs are HDCP compliant, ensuring display of content protected media. The MRM-701 is ideal for use in single-display applications that require a hybrid switcher for integration of digital and analog video sources and associated audio signals.

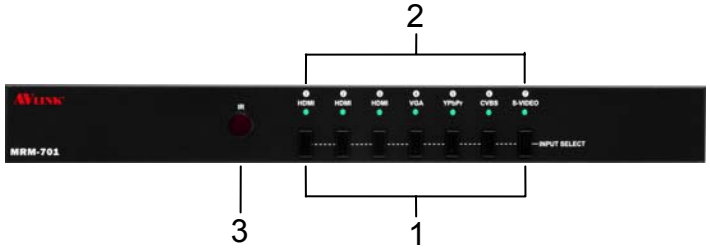
Features

- Deep Color video up to 12-bits, 1080p@60Hz (when HDMI input to HDMI output)
- Compliant with HDMI 1.3a and DVI 1.0 standards
- Fully HDCP compliant
- Video Inputs: 3 x HDMI, 1 x VGA, 1x YPbPr, 1 x CVBS, 1 x S-Video
- Audio Inputs: 3 x HDMI, 3 x 2-chn RCA(work with YPbPr/ CVBS/ S-Video), 1*x3.5mm (work with VGA)
- Video Output: 1 x HDMI
- Audio Output: 1x 2-chn analog RCA
- IR Remote controller for operation.
- Computer can be used RS 232 to control the MRM-701
- 1U rack design

Specifications

Function	MRM-701
HDMI Input Connector	3
VGA Input Connector	1
YPbPr Input Connector	1
CVBS Input Connector	1
S-Video Input Connector	1
HDMI Output Connector	1
Max. Resolution	UXGA, 1080p
Remote control port	RS232, 9600, 8 data bit, no parity, 1 stop bit
Power Adapter (Min.)	DC 12V with lock
Housing	Metal
Weight	1800g
Dimensions (LxWxH)	384x173x45mm

FRONT VIEW



1. Input port selection switch
   Press the switch to access the selected video source.
2. Port LEDs
   LED lights up when the input port has been successfully selected.
3. IR receiver
   Take aim at IR receiver with remote controller.

REAR VIEW

1. Power Supply
   Plug the power adapter.
2. RS232 port
   Use a 9-pin RS-232 cable to connect both computer serial port and MRM-701's RS-232 port, refer to" Matrix Application Software"
3. Video Input port
   3 x HDMI, 1 x VGA, 1x YPbPr, 1 x CVBS, 1 x S-Video
4. HDMI out port
5. Audio input port
   Work with input port: VGA, YPbPr, CVBS, S-Video

Installation

Before the installation, making sure the MRM-701 and monitor are turning off.

1. Making sure all equipments are turned off.
2. Plug the monitor cable into the HDMI OUT port connector.
3. Plug the extension cables from video source device (DVD player, PC, Digital camera) into the Video IN port connectors.
4. Plug the power adapter into the wall socket.
5. Connect the power adapter with the HDMI selector.
6. Turn on the monitor first.
7. Turn on the DVD player/TV receiver.

Operation

1. Port selection

- Press the button of "port selection switch" for accessing the wanted DVD player/TV receiver.
- The selected corresponding port will light on for the LEDs which indicating the port is actived.

2. IR remote control

- Use “1” ~”7” key to select video input port.
- Use “◄”, “►” key to select another video input port.
- Use ”⏻” key to power on/off MRM-701.

Support HDMI mode

Max resolution: UXGA(1600x1200@60), 1080p@60, 12-bit.

Support VGA mode

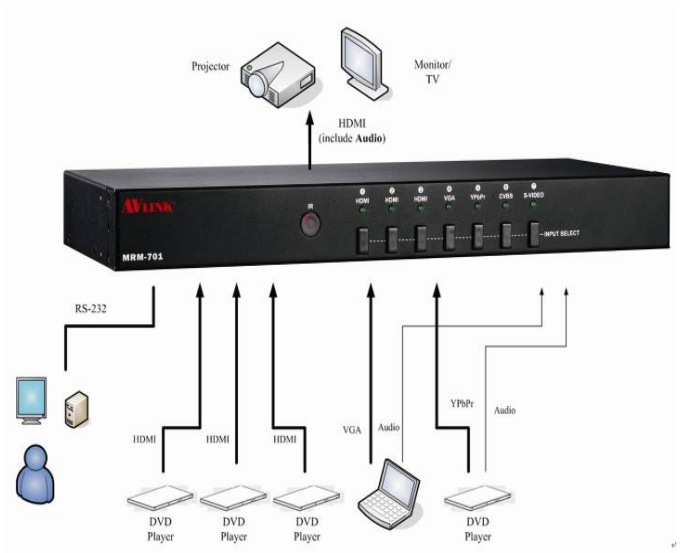
Analog	Resolution	Frequency(Hz)
VGA	640x480	60 / 72 / 75 / 85
VGA	720x400	70 / 85
SVGA	800x600	56 / 60 / 72 / 75 / 85
WVGA	848x480	60
XGA	1024x768	60 / 70 / 75 / 85
SXGA	1152x864	75
SXGA	1280x768	60RB/ 60 / 75 / 85
WXGA	1280x800	60
SXGA	1280x960	60 / 85
SXGA	1280x1024	60 / 75 / 85
WXGA	1360x768	60
SXGA+	1400x1050	60RB / 75
WXGA+	1440x900	60
SXGA+	1440x1050	60
UXGA	1600x1200	60
WSXGA+	1680x1050	60
1080p	1920x1080	60
WUXGA	1920x1200	60RB
720p	1280x720	60

Support YPbPr mode

Analog	Resolution	Frequency(Hz)
480i	720x480	60
576i	720x576	50
480p	720x480	60
576p	720x576	50
720p	1280x720	50 / 60
1080i	1920x1080	50 / 60
1080p	1920x1080	50 / 60

Support CVBS/ S-Video mode

Analog	Resolution	Frequency(Hz)
480i	720x480	60
576i	720x576	50



Matrix Application Software

Software Introduction

The 《AV Matrix》 Matrix control software applies to different input/output matrixes.

Software Activation

Power on the computer: Implement the **AV Matrix.msi** to activate installation screen as below, click **“Next”**. And follow the instructions on screen to finish the installation.

Connect MRM-701 and PC

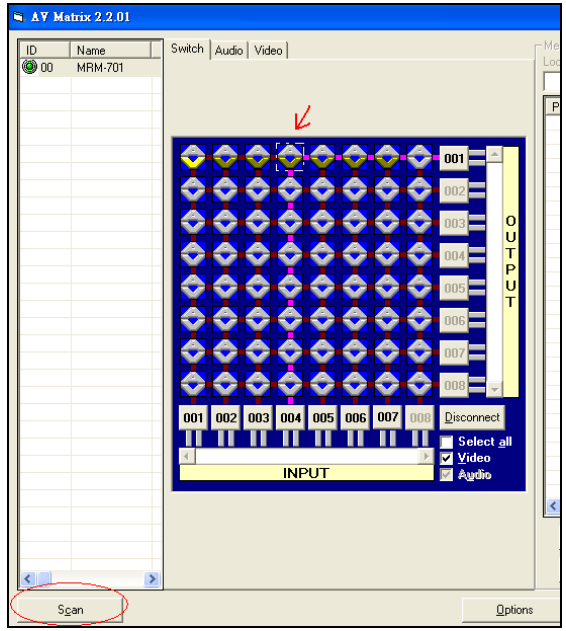
You must power off the MRM-701. Then, connect the MRM-701’s RS-232 port to the PC’s RS-232 port.

Matrix Configuration

After finishing installation, click AV Matrix to active AV Matrix Application. In the **“Options”** screen, select the connected PC Port number and Baud rate, and then click **“OK”**.

Press the “Scan” and found the connected MRM-701 first.

Then use mouse cursor to select which input port to switch, and press the left button



Communication Protocol/Control Command Code

Communication Protocol: Baud rate 9600bps, no odd or even calibration bit address, 8bit transmission address, 1bit stop address. Please refer to the **“Command list.pdf”** in the CD-ROM for more relative **Command Code** information.

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